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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,807	08/07/2006	Alain Colin	6003.1075	2793
23280 7590 02/13/2009 Davidson, Davidson & Kappel, LLC 485 7th Avenue 14th Floor New York, NY 10018				
EXAMINER				
BANH, DAVID H				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/588,807

**Applicant(s)**

COLIN ET AL.

**Examiner**

DAVID BANH

**Art Unit**

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on November 19, 2008 have been fully considered but they are not persuasive. Applicant's arguments are directed towards the rejection of claims 11 and 12, now amended to constitute a single claim 11. Applicant alleges that the rejection is defective because the reference Markham et al. does not teach a control interface for data exchange. Applicant argues that no "adjusting" is provided as now recited in claim 11. The claim language has "...the control interface adjusting or selecting at least one of the resolution ratio, the frequency ratio and the phase relation of the first signal and second signal..." In Markham et al., the evaluation unit is the circuit **800**, and the circuit **800** contains a component which generates a second signal having a phase relation to the first signal (column 5, lines 5-15, Fig. 8). Thus the circuit **800**, being the evaluation unit, has selected the phase relation property of the first signal (associated with **200A**) and has produced a synthesized second signal that is an adjustment of the first signal **200A** in the phase relation property.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11, 13, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Markham et al. (US Patent 6,215,119).

Markham et al. teaches an encoder **200** (column 3, lines 50-55) for generating a periodic signal in response to the rotation of a rotary element **100** (column 3, line 30) and further an evaluation unit **800** (column 5, lines 15- 30, circuit) that is capable of generating a second signal having a resolution ratio (column 5, lines 60-65), a frequency ratio (column 5, lines 40-50) and a phase relation to the first signal (column 5, lines 5-15). The evaluation unit selects the phase relation of the first signal and the second signal. The evaluation unit produces a second signal in response to the first signal have a modified phase relation (column 5, lines 5-15). Thus the evaluation unit comprises a control interface for data exchange.

For claim 13: Markham et al. teaches that the evaluation unit generates an output (column 5, lines 7, synthesizes a signal) that is used to drive a pulse controlled device (column 12, claim 21, controlling timing of device by corrected signal output).

For claim 16: Markham et al. teaches that the first and second signals are generated as a sequence of signal pulses **282** (column 4, lines 1-3).

For claim 17: Markham et al. teaches that the rotary element is a codewheel (column 3, line 30, **100**), which is an 8mm shaft (column 3, line 33).

#### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markham et al. (US Patent 6,215,119) in view of Ecklemeyer (US Patent 4,271,379).

Markham et al. teaches all of the limitations of claim 14 as found in claim 11. Markham et al. does not teach that the resolution of the second signal is lower than the resolution of the first signal. However, Ecklemeyer teaches a means of changing the resolution of a pulse signal for pulse trains carrying information about the speed and position of a motor (column 6, lines 18-45, claim 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the resolution changing means of Ecklemeyer with the invention taught by Markham et al. for the purpose of controlling the first and second signals of Markham et al. enabling the resolution of the output signal to be reduced to below the resolution of the incoming signals for the purpose of reducing the noise and random fluctuations that could be visible at higher resolutions.

For claim 15: The combination taught in claim 14 includes a divider (column 6, lines 18-45, speed adjusting means to adjust number of pulses per resolution) for reducing the resolution of the first signal.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Markham et al. (US Patent 6,215,119) in view of Jackson et al. (US Patent 7,302,237).

Markham et al. teaches all of the limitations of claim 18 as found in parent claim 11 above. Markham et al. does not teach a further synthesizer for generating a further signal having a further resolution ratio, frequency ratio and phase relationship to the first signal. However, Jackson teaches a signal synthesizer that generates signals (column 6, lines 20-24, signal generator 10), the signal having a frequency ratio (column 30-40, frequency as divide ratio) and a phase relation (column 2, lines 5-15, phase offset). Jackson does not discuss a resolution ratio, however, Ecklemeyer teaches a means for changing the resolution of a given signal (column 6,

lines 18-45, claim 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Markham et al. with the signal generator of Jackson et al. and the resolution modifier of Ecklemeyer for the purpose of being able to produce an optimized synthesized signal that be used to control the position of a rotary element.

7. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markham et al. (US Patent 6,215,119) in view of Marmin (US Patent 5,232,367).

For claim 19, Markham et al. teaches all of the limitations of claim 19 as found in claim 11.

Markham et al. does not teach that the rotary element is found in a folding apparatus of a rotary offset press. However, Marmin teaches a folding apparatus in a rotary offset press (column 1, lines 5-10), including rotary elements (see Figure 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the rotary element taught by Markham et al. as the rotary element of a folding apparatus of a rotary offset press as its position is more accurately determinable and controlled.

For claim 20, the combination used to reject claim 19 teaches an offset press comprising at least one rotary element of the type recited in claim 11.

#### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID BANH whose telephone number is (571)270-3851. The examiner can normally be reached on M-Th 9:30AM-8PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571)272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DHB  
February 12, 2009

/Daniel J. Colilla/  
Primary Examiner  
Art Unit 2854

Application/Control Number: 10/588,807  
Art Unit: 2854

Page 7